WSDOT/ACEC Structures/Geotechnical Team MEETING NOTES

November 17, 2023 -- 9:00 AM - 11:15 AM MS Teams Meeting

WSDOT	Evan Grimm. PE/SE	WSDOT – Bridge Design (co-chair)	X
	Katie Olleman, PE	WSDOT - Bridge Design	X
	Doug Olson, PE	WSDOT – Bridge Design	X
	Richard Brice, PE	WSDOT – Bridge Design	
	Jeri Bernstein, PE/SE	Washington State Ferries	
	Julie Heilman, PE	WSDOT – Hydraulic Office	
	Andrew Fiske, PE	WSDOT – Geotechnical Office	X
ACEC	Joan Zhong-Brisbois, PE/SE	Jacobs (co-chair)	X
	Lee Andrews, PE/SE	HDR	X
	Matt Barber, PE	WSP	X
	Matt Baughman, PE/SE	COWI	X
	Stan Boyle, PE	Shannon & Wilson	X
	Brice Exley, PE	Haley & Aldrich	X
	Eric Herzstein, PE/SE	Parsons	X
	Yang Jiang, PE/SE	HNTB	X
	Scott Phelan, PE/SE	Systra-IBT	X
	Reza Sehhati, PE	TBD	

1. Review meeting agenda (5 minutes) – All

No additional items added.

- Review minutes from September 15th meeting (5 minutes) All
 Minutes approved.
- 3. Seismic Mapping & Implementation (15 minutes) to confirm with Andrew Fiske

Andrew shared the coming changes on "Seismic Response Spectra Development". The risk-targeted seismic design approach will be mandatory in both the AASHTO LRFD Bridge Design Specs and the AASHTO LRFD Seismic Bridge Design Guide Specs. It applies to the "General Procedure" as well as site-specific ground motion development and design. Will likely need training to do site specific risk-targeted design.

4. AASHTO STEM information (15 minutes) – Evan

Evan introduced STEM outreach program where WSDOT is partnering with AASHTO to address workforce development for transportation careers. Hands-on educational modules were developed to introduce students to transportation careers and civil engineering. There are nine modules: Bridge Design, Highway Safety, Magnetic Levitation, Design and Construction, Motion, Environmental Engineering, Traffic Technology, Connected and Automated Vehicles, Roadways. More information is forthcoming, volunteers from practice engineers are welcome and highly encouraged to support this worthy cause.

Break (no break)

5. Round Table discussion on workforce development (20 minutes) – All

Early retirement of agency's staff strained the workforce shortage. WSDOT partner with other agencies to bring in education and training for its own staff; reach out to private partners to share their knowledge.

ACEC firms pair their junior and senior staff to create training opportunities; however tight project delivery schedule can sometimes sideline the training; hiring new graduates faces competition with the more popular choices such as computer science; compensation would also need to be taken into consideration while balancing the pay of the established staff; an enlarged resume pool helps but often with the licensure hurdle; lump sum contract could encourage efficiency and is more suitable for certain type of projects such as bridge load rating; collaboration in PDB delivery could bring down cost by allocating risks more appropriately, and early alignment of project goals and incentives via owners active participation.

The discussion also referred two sources with the following links.

https://interestingengineering.com/culture/what-percentage-of-engineering-graduates-actually-work-in-their-respective-fields

Lack of civil engineers a bottleneck for WA's large transportation projects | The Seattle Times

6. Question of the month – Waterproofing wildlife crossings <u>AASHTO Journal</u> - Wyoming DOT Completes Dry Piney Wildlife Crossing (transportation.org) (15 minutes) – All

A well-designed drainage could mitigate the potential problem down the road. In areas where cold air form icicles at the crown of crossing, suggest warm up the span during the freezing season.

7. Meeting adjourned at 11:15am.

Future meeting dates:

January 19, 2024 March 15, 2024 May 17, 2024